

REMARKS/ARGUMENTS

After entry of this amendment, claims 56-58, 61, 63-66, 71-79, 81, 83, 85, 86, 92-94, 97, 99, 101-191, 194-205, and 207-209 are pending. Claims 56-58, 61, 63-66, 71-79, 81, 83, 86, 86, 92-94, 97, 99, 164-191, 194-205, and 207-209 are under consideration, claims 1-55, 59, 60, 62, 67-70, 80, 84, 87-91, 95, 96, 98, 100, 192, 193, and 206 having been canceled and claims 101-163 having been withdrawn.

Claim 56 has been amended to describe therapeutic treatment using alternative terminology (*see, e.g.*, specification at pp. 27, 14-17). Claim 183 has been similarly amended to describe prophylactic treatment using alternative terminology (*see, e.g.*, specification at p. 27, lines 12-14). Claim 97 directed to pharmaceutical compositions has been amended to delete reference to chimeric antibodies. Dependent claims 68, 69, 192 and 193 rendered redundant by previous amendments have been cancelled. Claims 56, 97, and 183 have been amended to add human antibodies (*see, e.g.*, specification at p. 2, line 30). Claims 56 and 183 have been amended to add pharmaceutical carrier (*see, e.g.*, specification at p. 32, line 7). Claims 92 and 207 have been amended to replace agent with pharmaceutical composition. Claims 93, 94, 208, and 209 have been amended to replace antibody with pharmaceutical composition. A few spelling and grammar errors have also been corrected. No claim amendment should be construed as acquiescence in any ground of rejection. Applicant addresses the outstanding rejections in the order made.

Claim objections

Claim 195 was objected to for depending from itself. Claim 195 has been amended to depend from claim 183.

Provisional obviousness type double patenting

Claims 56-58, 61, 63-66, 68-69, 71-79, 81, 85, 86, 89, 92-94, 97, and 99 are provisionally rejected for obviousness type double patenting as being unpatentable over claims

1-30 of U.S. Application No. 09/580,015. Applicant respectfully point out U.S. Application No. 09/580,015 is abandoned thus the rejection is moot.

Claims 56-82, 85, 86, 89, 92-94, 97, and 99 are provisionally rejected for obviousness type double patenting over claims 43-47, 135-135 [sic], 144, and 145 of U.S. Application No. 09/979,701. Applicants propose the issues be held in abeyance until indication of allowability in the present case. Applicant will then consider providing a terminal disclaimer over cited cases provided the cited case has been or is about to patented, the claims in the cited cases have not been divided from those in the present case by restriction requirement or election of species, and the claims in the cited case are in conflict with those in the present case at this time.

Claims 183-209 are provisionally rejected for obviousness type double patenting as being unpatentable over claims 1-30 of U.S. Application No. 09/580,015. Applicant respectfully point out U.S. Application No. 09/580,015 is abandoned thus the rejection is moot.

Claims 183-209 are provisionally rejected for obviousness type double patenting over claims 43-47, 135-135 [sic], 144, and 145 of U.S. Application No. 09/979,701. Applicants propose the issues be held in abeyance until indication of allowability in the present case. Applicant will then consider providing a terminal disclaimer over cited cases provided the cited case has been or is about to patented, the claims in the cited cases have not been divided from those in the present case by restriction requirement or election of species, and the claims in the cited case are in conflict with those in the present case at this time.

35 U.S.C. § 112, first paragraph

Claims 57, 58 and 99 remain rejected on the basis that no declaration has been provided that the deposit of antibody 266 was in accordance with the Budapest Treaty, and that the specification has not been amended to recite the address of the depository. In response, a declaration stating that the deposit was in accordance with the Budapest Treaty and a copy of the certificate of deposit was provided with applicant's last response. Another copy of which is attached hereto. With respect to the address of the depository, the specification is further amended to include the same.

Claims 56-58, 61, 63-66, 68-69, 71-79, 81, 85-86, 89 and 92-94 stand rejected as being enabled for "treating" Alzheimer's disease but allegedly not enabled for "therapeutically treating" Alzheimer's disease. Likewise new claims 183-209 stand rejected as not enabled for "prophylactically" treating Alzheimer's disease. In response, it appears that the rejection is based on an incorrect premise that "therapeutically" necessarily requires a complete cure, and "prophylactically" a total prevention. Such a construction is inconsistent with the way these terms are used in the specification (*see* p. 27, lines 12-17) and the art, in which few methods of treatment consistently achieve total cure or prevention. Indeed, even the definition of "therapeutic" provided by the Examiner is not confined to a total cure.

Despite applicant's disagreement with the basis of rejection, the concept of therapeutic and prophylactic treatments can be expressed in other words based on the disclosure of the specification and the claims have accordingly been amended in an effort to put aside what appears to be a largely semantic issue. No narrowing of claim scope is intended by the amendment. Should the amendment not be accepted, applicant reserves the right to reinstate the original language for purposes of appeal.

The Examiner's comments at pp. 9-11 appear to be directed to same issue discussed above and rendered moot by the claim amendment. Nevertheless, insofar as they reflect any additional concerns, applicant will observe as follows. Spooner discusses various issues arising from active administration of A β . These are not relevant to passive administration of antibodies, as claimed. Walker discussed *in vivo* labeling of cerebral A β with 10D5. The Examiner alleges that the monoclonal antibody 10D5 did not disaggregate, prevent, or inhibit A β aggregation. Walker did not discuss not therapeutic treatment. Nevertheless, the present application provides data showing that an appropriate regime of 10D5 does reduce levels of A β in the brain of a transgenic mouse model of Alzheimer's disease. Goldsby discusses immunogenicity of mouse antibodies. However, the present claims specify chimeric or humanized antibodies for which immunogenicity is not expected to prevent repeated administrations.

For all of these reasons, applicant requests withdrawal of the rejection.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 56 and 183 stand rejected under 35 U.S.C. § 112, second paragraph. The terms "prophylactically" "therapeutically" and perhaps "treating" are alleged to be indefinite. It is not entirely apparent from the office action what the Examiner perceives is the ambiguity in the commonly used terms "prophylactically" and "therapeutically." Nevertheless, these terms are no longer used in the claims so the rejection is moot. It is not entirely clear whether the Examiner find the term "treating" unclear independent of her comments regarding prophylaxis and therapeutics. However, applicant will observe that the treating required by the claims resides in the step of administering an antibody. The claims neither require nor exclude the possibility that the patient may be subject to additional treatments. Breadth is not to be equated with indefiniteness. *In re Miller*, 169 USPQ 597 (CCPA 1971).

35 U.S.C. § 102

Claims 56-58, 61, 63-66, 68-69, 71-79, 81, 85-86, 89, 92-94, 97, 99, 164-209 stand rejected as anticipated by Schenk et al., US 5,593,846 ('846 patent). The Examiner alleges that '846 discloses the 266 antibody and pharmaceutical compositions containing the same. The Examiner acknowledges that '846 is silent regarding chimeric and humanized antibodies but alleges disclosure of the chimeric antibodies from the reference to recombinantly produced antibodies and to humanized antibodies from the citation to Harlow and Lane. This rejection is respectfully traversed.

The '846 patent discusses detecting A β peptide in culture media and body fluids (col. 6, lines 1-15) and screening compounds for capacity to inhibit production of the peptide (cols. 10-11). Such compounds are proposed to be useful for treating Alzheimer's disease (col. 11, lines 15-40). The 266 antibody and other antibodies to A β are mentioned in the context of assays for detection of A β peptide (*see* cols 8 and 9, and particularly col. 14, lines 13-27).

Claims 56, 183 and claims depending therefrom are not anticipated by the '846 patent because the '846 patent does not disclose methods of treating Alzheimer's disease or reducing risk or delaying onset of the same by administering 266 or other antibody to A β . As discussed above, 266 and other antibodies to A β are used as a means to detect A β and thereby

discover inhibitors of A β production. The '846 patent does not disclose using 266 or other antibodies to A β themselves as means of treating, reducing risk or delaying onset of Alzheimer's disease.

Claim 97 (and claims depending therefrom), particularly as amended, are not anticipated by the '846 patent at least because the '846 patent does not disclosure humanized antibodies that specifically bind to an epitope within A β 13-28 as claimed. The Examiner relies on the patent citation to Harlow and Lane (1988) for disclosure of humanized antibodies. Applicant does not find any reference to humanized antibodies in the index to this two volume set, and if the rejection is maintained would appreciate clarification from the Examiner where such disclosure is found, if at all. However, even assuming that Harlow and Lane does provide some disclosure of humanized antibodies, this is presumably a small section within a two volume set. The '846 patent refers to Harlow and Lane as providing techniques "for preparing monoclonal antibodies." It is respectfully submitted that such a reference to a large laboratory manual work by a patent is insufficient to treat every detail within the reference work in the same manner as the text of the patent itself.

For these reasons, withdrawal of the rejection is respectfully requested.

Claim rejections under 35 U.S.C. § 103

The Examiner alleges that the application currently names joint inventors. In fact, the application names only one inventor, Dr. Dale Schenk.

The Examiner alleges that claims 56-58, 61, 63-66, 68-69, 71-79, 81, 85-86, 89, 92-94 and 183-209 would have been obvious over the '846 patent in view of Queen. The Examiner alleges that it would have been obvious to the person of ordinary skill to modify the teachings of the '846 patent and produce humanized or chimeric antibodies for the benefit of reduced immunogenicity. This rejection is respectfully traversed, particularly as applied to the pending claims. The skilled person would not have been motivated to combine the teachings of the cited references.

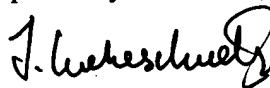
Application No. 09/724,319
Amendment dated December 15, 2005
Reply to Office Action of August 15, 2005

With respect to claims 56 and 183, and claims depending therefrom, Queen does nothing to cure the lack of teaching of the '846 patent with respect to use of antibodies to A β in methods of treating or reducing risk or delaying onset of Alzheimer's disease.

With respect to claim 97 and claims depending therefrom, the proposed benefit of reduced immunogenicity would not have motivated combination of the references. Reduced immunogenicity is a benefit for therapeutic administration of an antibody but not from use of an antibody in the detection assays discussed in the '846 patent. As noted above, the '846 does not discuss therapeutic administration of A β antibodies. Accordingly, the skilled person would not have been motivated to combine the teachings of the cited references.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



Joe Liebeschuetz
Reg. No. 37,505

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-324-2422
Attachment (as noted)
JOL:RLC:jol
60658983 v1

ATCC

10801 University Blvd • Manassas, VA 20110-2209 • Telephone: 703-365-2700 • FAX: 703-365-2745

BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT ISSUED PURSUANT TO RULE 7.3 AND VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

To: (Name and Address of Depositor or Attorney)

Elan Pharmaceuticals, Inc.
Attn: Nina Ashton
800 Gateway Boulevard
South San Francisco, CA 94080

Deposited on Behalf of: Elan Pharmaceuticals, Inc.

Identification Reference by Depositor:

Patent Deposit Designation

Hybridoma resulting from fusion of SP2/0 with A/J mouse spleen: 266.2

PTA-6123

The deposit was accompanied by: ☐ a scientific description ☐ a proposed taxonomic description indicated above.

The deposit was received July 20, 2004 by this International Depository Authority and has been accepted.

AT YOUR REQUEST: ☒ We will inform you of requests for the strain for 30 years.

The strain will be made available if a patent office signatory to the Budapest Treaty certifies one's right to receive, or if a U.S. Patent is issued citing the strain, and ATCC is instructed by the United States Patent & Trademark Office or the depositor to release said strain.

If the culture should die or be destroyed during the effective term of the deposit, it shall be your responsibility to replace it with living culture of the same.

The strain will be maintained for a period of at least 30 years from date of deposit, or five years after the most recent request for a sample, whichever is longer. The United States and many other countries are signatory to the Budapest Treaty.

The viability of the culture cited above was tested July 28, 2004. On that date, the culture was viable.

International Depository Authority: American Type Culture Collection, Manassas, VA 20110-2209 USA.

Signature of person having authority to represent ATCC:

Marie Harris
Marie Harris, Patent Specialist, ATCC Patent Depository

Date: July 30, 2004

cc: Joe Liebeschuetz
Docket or Case No.: 15270J-004720US